

- Figs.* 5-6. *Dicaiothrips rex*, sp. n., ♂, from Silhouette.
 5. Head, pronotum, and right fore-leg. $\times 30$.
 6. End of abdomen. $\times 30$.
Fig. 7. *Dicaiothrips stenocephalus*, Bagn., ♂, from East Africa.
 7. Head and pronotum. $\times 30$.
Fig. 8. *Dicaiothrips hystrix*, sp. n., ♂, from Silhouette.
 8. Head and pronotum. $\times 30$.
Fig. 9. *Dicaiothrips mahensis*, sp. n., ♂, from Mahé.
 9. Head, pronotum, and right fore-coxa. $\times 30$.
Figs. 10-11. *Gynaikothrips scotti*, sp. n., ♀, from Silhouette.
 10. Head and pronotum. $\times 70$.
 11. End of abdomen. $\times 70$.

XXXV.—On the Genus *Grammostola*, Simon. By MELLO-LEITÃO, M.D., Fellow of the Brazilian Society of Sciences.

THE genus *Grammostola*, created by E. Simon to his *Eurytelma pulchripes*, is essentially neotropical, extending itself from 20° to 30° south latitude; and almost all his species inhabit the southern Brazilian states (S. Paulo, Paraná, Santa Catharina, Rio Grande do Sul) and neighbouring countries.

In the collections of the Natural History Museums of S. Paulo and Rio de Janeiro I have seen almost all the known and some new species of this genus, and their study permits me to amend and complete Simon's and Pocock's diagnoses.

GRAMMOSTOLA, Simon, 1892 = CITHAROSCELUS, Pocock, 1903.

Cephalothorax as wide as long or a little longer, with thoracic fovea deep, right transverse or a little curved.

Eyes small; those of anterior file subequal and subequally spaced, in a more or less procurved file. Posterior median eyes generally much smaller than the anterior ones.

The *stridulating organ* consists of a thick cluster of slender bristles, forming a pad upon the distal third of the posterior side of the coxa of the palp, and a cluster of similar bristles above and below the suture, at the distal end of the coxa of the anterior leg. These bristles are more or less numerous.

Sternum flat, with marginal posterior sigillæ.

Legs 4, 1, 2, 3 or 4-1, 2, 3 or 1, 4, 2, 3. The scopula of the protarsus i. and ii. either covering less than half the lower

side of the segment or extending to its base ; of iii. about half and of iv. nearly one-third or less.

Protarsus i. (in the male) sometimes more or less bowed.



Geographical Distribution of the Genus *Grammostola*.

Tibiæ i. (in male) with two apical spurs ; upper tibial spur rounded at apex, unarmed or with one or two spines lying along its underside ; lower spur strong, directed vertically

downwards, then curving forwards at the tip, which is sometimes armed above with a short spine.

Palpal organ piriform; the spine attenuate, pointed, with slight spiral curvature.

There are nineteen species of *Grammostola*, which I have tabulated as follows:—

Table of Species.

- A. Stridulating bristles few in number, large and red distally. Legs iv. longer than i. *spatulata* (F. Cambridge).
- AA. Stridulating bristles numerous and close-set.
- B. Protarsus i. scopulate almost to base.
- C. Protarsus i. (in the male) strongly arcuate.
- D. Anterior eyes equidistant; the median ones equal to or a little smaller than laterals.
- E. Eyes, anterior line strongly procurved; upper tibial spur i. (in ♂) blunt, without rastellus; abdomen clothed with golden hairs *chalcothrix*, Chamberlin.
- EE. Eyes, anterior line slightly procurved; upper tibial spur i. (in ♂) with a short rastellus at the tip; abdomen rusty brown .. *ferruginea*, sp. n.
- DD. Anterior median eyes much smaller than the lateral ones and separated by a space exceeding two diameters and by about a diameter from the laterals. Upper tibial spur with prominent internal angle, without rastellus .. *pulchra*, sp. n.
- CC. Protarsus i. (in ♂) less arcuate.
- D. Anterior eyes subequal and subequally spaced; ocular tubercle moderately convex. Legs with fine longitudinal light yellow lines *pulchripes* (Simon).
- DD. Anterior median eyes smaller than the laterals, separated from each other by a space exceeding their diameter and by about a diameter from the laterals.
- E. Ocular tubercle moderately convex. Posterior median eyes about as large as the anterior ones. Legs with bright longitudinal lines *fasciata*, sp. n.

- EE. Ocular tubercle very high.
Posterior median eyes much smaller than the anterior ones.
Legs without bright longitudinal lines. *mollicoma* (Ausserer).
- BB. Scopula on protarsus i. not nearly extending to its base.
- C. Protarsus i. (in ♂) strongly arcuate.
- D. There are some short stout spines on the posterior side of the coxa of the palp beneath the stridulating bristles *gossei*, Poc.
- DD. There are no spines beneath the stridulating bristles on the coxa of the palp. (Cephalothorax shorter than protarsus iv. and patella+tibia i. or iv.) *argentinense*, Strand.
- CC. Protarsus i. (in ♂) less arcuate.
- D. Scopula on protarsus i. covering more than half the lower side of the segment.
- E. Legs iv. much longer than i. . . *grandicola*, Strand.
- EE. Legs iv. and i. subequal.
- F. Legs i. longer than iv.; protarsus i. (in ♂) shorter than tibia i. *brevimetatarsis*, Strand.
- FF. Legs i. equal to or little shorter than i.
- G. Cephalothorax longer than wide.
- H. Cephalothorax as long as protarsus iv. *alticeps* (Pocock).
- HH. Cephalothorax longer than protarsus iv. *cala*, Chamberlin.
- GG. Cephalothorax as wide as long and longer than protarsus iv.
- II. Upper tibial spur i. (in ♂) with rounded blunt tip; coxæ of pedipalp and falces with fiery-red bristles *actæon* (Pocock).
- HH. Upper tibial spur i. (in ♂) with prominent external apical angle; coxæ of pedipalp and falces with dull violet bristles. *gigantea*, sp. n.
- DD. Scopula on protarsus i. covering less than half the lower side of the segment.
- E. Cephalothorax longer than wide; legs iv. longer than i. (Median anterior eyes smaller than laterals.)
- F. Cephalothorax much smaller than patella+tibia i. or iv.; patella+tibia iv. than patella+tibia i. *iheringii*, ♂ (Keyserling).

- FF. Cephalothorax nearly as long as patella + tibia i.
 G. Cephalothorax a little longer than patella + tibia i. *iheringii*, ♀ (Keyserling).
 GG. Cephalothorax longer than patella + tibia iv. and shorter than patella + tibia i. *familiaris* (Bertkau).
 EE. Cephalothorax as wide as long; legs i. longer than iv.
 F. Stridulating bristles few in number above the suture of the coxa i.; lower tibial spur i. (in ♂) without spine on the outer side *roquettei*, sp. n.
 FF. Stridulating bristles numerous and close-set above the suture of coxa i.; lower tibial spur i. (in ♂) with a strong, little arcuate spine on the outer side *longimana*, sp. n.

1. *Grammostola spatulata* (F. Cambridge).

Eurytelma spatulatum, F. Cambridge, 1897, Biol. Centr.-Amer. vol. ii. p. 24, pt. i. p. 19.

Citharoscelus kochii, Pocock, 1899, Ann. & Mag. Nat. Hist. ser. 7, vol. iii. p. 348; Simon, 1902, Hamburg. Mag. alh. Sammlr. p. 5.

Citharoscelus spatulatus, Pocock, 1903, Ann. & Mag. Nat. Hist. ser. 7, vol. xi. p. 98.

Grammostola spatulata, Simon, 1903, Hist. Nat. Ar. vol. ii. p. 935.

This species has been described by F. Cambridge as occurring in Mexico; according to Simon the species does not occur in Mexico, Chile being its right habitat.

2. *Grammostola ferruginea* *, sp. n.

♂.—35 mm.; ceph. 18 × 16 mm.; legs 54–51–50–60 mm.; tibia + patella i. 19 mm., iv. 20 mm.; protarsus iv. 15 mm.

Cephalothorax, mandibles, pedipalps, legs, and abdomen brownish black; the carapace with marginal light bristles. Legs and abdomen with large brownish bristles. Sternum, labium, and coxæ of legs rusty brown; bristles of the coxæ of pedipalp and falces fiery red. Lower side of abdomen chestnut.

Cephalothorax longer than wide, shorter than patella and tibia i. or iv., longer than protarsus iv.; fovea deep, right transverse. Ocular tubercle high, a third broader than long. Eyes of anterior line slightly procurved, the anterior edge of the medians being before the centre of the laterals, the medians smaller, separated from each other by a space which

* Rusty.

equals their diameter ; posterior medians much smaller than the anterior medians, closer to posterior laterals, which are about as large as the anterior laterals and separated from them by a space which is quite equal to the long diameter of the latter.

Stridulating bristles numerous and close-set, forming a subquadrate pad upon the distal third of the posterior side of the coxa of the palp, and a cluster above and below the suture at the distal end of coxa i.

Posterior sternal sigillæ submarginal. Protarsus i. strongly arcuate, scopulated almost to base, with two apical and two basal spines ; protarsal scopula ii. covering $\frac{3}{4}$ segment, with a pair of long spines at its base ; of iii. covering $\frac{1}{2}$, with many basal spines ; of iv. covering about $\frac{1}{3}$, which is elsewhere strongly spined. Tibiæ of all the legs and of the palpus spined. Spurs of tibia i. well developed, the upper stout, straight, blunt, and bearing a rastellum of short black spines at tip ; the lower crescently cylindrical, curved, with a sharp point.

Hab. Paraná. Coll. Bicego. Type in the S. Paulo Museum (no. 156).

3. *Grammostola chalcothrix*, Chamberlin.

Grammostola chalcothrix, Chamberlin, 1917, Bull. Mus. Comp. Zool. Harvard Coll. vol. lxi. p. 40.

Hab. Republica Argentina.

4. *Grammostola pulchra* *, sp. n.

♂.—29 mm. ; ceph. 15 × 14 mm. ; legs 50–48–46–55 mm. ; patella + tibia i. 19 mm., iv. 19 mm. ; protarsus iv. 15 mm.

♀.—45 mm. ; ceph. 17 × 14 mm. ; legs 46–42–39–50 mm. ; patella + tibia i. 15.5 mm., iv. 15.5 mm. ; protarsus iv. 12 mm.

♂.—Cephalothorax, mandibles, pedipalps, legs, and abdomen brownish black, with long bristles of light greyish tips, so that the spider seems black with abundant light points. Sternum, labium, and coxæ velvety blackish. Coxæ of pedipalp and falces with fiery-red bristles.

Cephalothorax longer than wide, distinctly shorter than patella and tibia i. or iv. and very slightly longer than protarsus iv. ; fovea deep, right transverse.

Ocular tubercle low, distinctly wider than long. Eyes of the anterior row strongly procurved, the anterior edge of the medians being at centre of the laterals, the median being

much smaller than the laterals, about two diameters apart, separated from the laterals about a diameter; posterior medians much smaller than the anterior medians, but not very widely separated from them, closer to posterior laterals, which are smaller than the anterior laterals and separated from them by a space which is about equal to the short diameter of the latter.

Stridulating organ as in the preceding species. Legs 4, 1, 2, 3; patella+tibia i. equal to iv.

Protarsus i. strongly arcuate, scopulated almost to base, with two apical and two basal spines; protarsal scopula ii. covering $\frac{4}{5}$ segment, with two spines at its base; of iii. covering $\frac{1}{2}$, with many basal spines; of iv. covering about $\frac{1}{6}$, which is elsewhere strongly spined; tibiæ of all the legs spined. Spurs of tibia i. well developed; the upper stout, straight, cylindrical, blunt, without rastellum, and bearing a long sinuous spine on its underside; the lower crescently cylindrical, curved, with a sharp tip.

♀.—Colour the same as in the male. Cephalothorax noticeably longer than wide (17:14), longer than patella and tibia i. or iv. Anterior median eyes more than two diameters apart and a little less from the laterals; posterior medians slightly smaller than the laterals.

Hab. Uruguayana (Rio Grande do Sul). Coll. E. Garbe. Types in the S. Paulo Museum (no. 122).

5. *Grammostola pulchripes* (Simon).

Eurypelma pulchripes, Simon, 1891, Ann. Soc. Entom. France, 1891, p. 311.

Grammostola pulchripes, Simon, 1892, Hist. Nat. Ar. vol. i. p. 163; 1903, vol. ii. p. 935.

Simon has described this species as occurring in Paraguay and Argentina. In the Rio de Janeiro Museum there are some specimens from the Brazilian state Paraná.

6. *Grammostola fasciata*, sp. n.

♀.—44 mm.; ceph. 17 × 15 mm.; legs 48-45-42-53 mm.; patella+tibia i. 18 mm., iv. 17 mm.; protarsus iv. 12.5 mm.

Carapace, falces, and legs pale brown; sternum and coxæ chocolate-brown. Legs with two pale longitudinal lines on femur, patella, tibia, and basal third of protarsus. Abdomen black, with large pale brown bristles; the underside of abdomen deep blackish brown.

Carapace noticeably longer than wide, shorter than patella

and tibia i., equal to patella and tibia iv. ; fovea deep, right transverse.

Ocular tubercle moderately convex, nearly round. Eyes small, those of anterior line slightly procurved, the anterior edge of the medians being a little before the centre of the laterals, nearly evenly spaced and very slightly unequal in size, the medians separated from each other by a space which exceeds their diameter and by about a diameter from the laterals. Posterior medians about as large as the anterior medians and nearly at the same distance from them and from the posterior laterals, which are about as large as the anterior laterals and separated from them scarcely $\frac{1}{2}$ diameter.

Stridulating organ consisting of a large cluster of fine close-set bristles clothing the distal third of the posterior surface of the coxa of the palp, and of two smaller clusters of similar close-set bristles at the distal end of the anterior surface of coxa i.—one just above, and the other, of slender and more abundant bristles, just below the suture.

Protarsal scopula i. covering the segment almost to base ; of ii. covering $\frac{2}{3}$, with two spines at its base ; of iii. covering $\frac{1}{2}$, with 1–2–1 spines at its base ; of iv. covering about $\frac{1}{5}$, which is elsewhere strongly spined ; tibiae of all the legs and of the palpus spined.

Hab. Paraná. Coll. Bicego. Type in the S. Paulo Museum (no. 126).

7. *Grammostola mollicoma* (Ausserer).

Eurypelma mollicomum, Ausserer, 1875, Verh. zool.-bot. Ges. Wien, vol. xxv. p. 198 ; Keyserling, 1877, Verh. zool.-bot. Ges. Wien, vol. xxvii. p. 612, pl. xiv. fig. 28.

Citharoscelus mollicomus, Pocock, 1903, Ann. & Mag. Nat. Hist. ser. 7, vol. xi. p. 98.

Grammostola mollicoma, Simon, 1903, Hist. Nat. Ar. vol. ii. p. 955 (nec *Eurypelma mollicomum* (Auss.), Simon, 1892) ; Strand, 1907, Jahres. Vereins vaterl. Naturk. Württemberg, vol. lxiii. p. 35.

It is a very common species in the Brazilian state Rio Grande do Sul and at Uruguay.

8. *Grammostola gossei* (Pocock).

Citharoscelus gossei, Pocock, 1900, Gosse's 'Aconcagua Valley,' p. 358, fig. 2 ; Pocock, 1903, Ann. & Mag. Nat. Hist. ser. 7, vol. xi. p. 98.

Grammostola gossei, Petrunkevitch, 1911, Bull. Amer. Mus. Nat. Hist. vol. xxix. p. 68.

Hab. Argentina : Aconcagua Valley, Lujan.

9. *Grammostola argentinense*, Strand.

Grammostola argentinense, Strand, 1907, Jahres. Vereins vaterl. Naturk. Württemberg, vol. lxiii. p. 29.

Hab. Argentina: San Carlos.

10. *Grammostola grandicola*, Strand.

Grammostola grandicola, Strand, 1908, Zool. Anzeiger, vol. xxxii. p. 770.

Hab. Paraguay, Argentina, and Rio Grande do Sul (Brazil).

11. *Grammostola brevimetatarsis*, Strand.

Grammostola brevimetatarsis, Strand, 1907, Jahres. Vereins vaterl. Naturk. Württemberg, vol. lxiii. p. 34.

Grammostola iheringi (Keys.), Strand, 1907; id. *ibid.* (nec *Eurypelma iheringii*, Keyserling, 1891).

Grammostola brevimetatarsis, Strand, 1912, Wiesbaden Jahrb. nassau. Ver. Naturk. p. 175.

Hab. Rio Grande do Sul.

A nearly allied species to *G. iheringii* (Keyserl.).

12. *Grammostola alticeps* (Pocock).

Citharoscelus alticeps, Pocock, 1903, Ann. & Mag. Nat. Hist. ser. 7, vol. xi. p. 100.

Grammostola alticeps, Petrunkevitch, 1911, Bull. Amer. Mus. Nat. Hist. vol. xxix. p. 68.

It occurs at Uruguay (*Pocock*) and Rio Grande do Sul (S. Paulo Museum collections).

13. *Grammostola cala*, Chamberlin.

Grammostola cala, Chamberlin, 1917, Bull. Mus. Comp. Zool. Harvard Coll. vol. lxi. p. 42.

Hab. Chile.

14. *Grammostola actæon* (Pocock).

Citharoscelus actæon, Pocock, 1903, Ann. & Mag. Nat. Hist. ser. 7, vol. xi. p. 99.

Grammostola actæon, Petrunkevitch, 1911, Bull. Amer. Mus. Nat. Hist. vol. xxix. p. 67.

It is the most common species of large mygalomorphic spiders, occurring at the Brazilian states Santa Catharina, Paraná, and Rio Grande do Sul. In the collections of the Natural History Museums of S. Paulo and Rio de Janeiro there are numerous specimens.

I give below the characters of the female, yet undescribed:—

♀.—65 mm.; ceph. 32×32 mm.; patella + tibia i. 30 mm., iv. 30 mm.; legs 90, 86, 84, 92 mm.

Colour and eyes the same as in male. Carapace as long as wide, longer than patellæ and tibia i. or iv. Patella and tibia i. equal to iv. Fovea, protarsal scopulæ, and stridulating organ as in male.

15. *Grammostola gigantea*, sp. n.

♂.—66 mm.; ceph. 28×28 mm.; legs 94, 87, 78, 94 mm.; patella + tibia i. 34 mm., iv. 32 mm.; protarsus iv. 23 mm.

The whole spider black; the abdomen with large dull red-wine bristles. Coxæ of pedipalps and falces with red-wine bristles. Legs with large blackish-violet bristles.

Carapace shorter than patella and tibia i. and iv., longer than protarsus iv.; fovea deep, right transverse. Ocular tubercle moderately convex. Anterior eyes equal and equally spaced, about two diameters apart; anterior line slightly procurved, the anterior edge of the medians being a little before the centre of the laterals; posterior medians much smaller than the anterior medians, but not very widely separated from them, closer to posterior laterals, which are about as large as the anterior laterals and separated from them by a space which is quite equal to the long diameter of the latter.

Stridulating organ consisting of very many simple, incrassate, but apically attenuate bristles, those on the coxa i. less numerous above and more close-set just below the suture.

Legs 4-1, 2, 3. Patella and tibia i. longer than iv. Protarsal scopula i. covering $\frac{2}{3}$ segment, with two spines at its base; of ii. covering $\frac{2}{3}$ segment with two spines at its base; of iii. covering a little more than $\frac{1}{3}$ segment; of iv. covering about $\frac{1}{6}$, which is elsewhere strongly spined; tibiæ of all the legs spined. Protarsus i. distinctly but slightly bowed at its proximal end; spurs of tibia i. well developed, the upper stout, straight, with sharp apical external angle, and bearing a long stout spine on its underside; the lower crescently cylindrical, curved, with a little tubercle on its apex and a long spine on its upperside at its proximal end.

Hab. Santa Catharina. Coll. Witte. Type in the S. Paulo, Museum.

16. *Grammostola iheringii* (Keyserling).

Eurypelma iheringii, Keyserling, 1891, Spinnen America's Brasil Sp. p. 19, pl. i. fig. 4.

Agathostola iheringii, Pocock, Ann. & Mag. Nat. Hist. ser. 6, vol. xvi. p. 223.

Citharoscelus iheringii, Pocock, 1903, Ann. & Mag. Nat. Hist. ser. 7, vol. xi. p. 99.

Grammostola iheringii, Simon, 1904, Hist. Nat. Ar. vol. ii. p. 935.

Hab. Rio Grande do Sul.

In the collections of the S. Paulo Museum there are some males and females (no. 131), collected by Dr. Hermann von Ihering at Rio Grande do Sul in 1890, and which are very probably the cotypes of Keyserling.

17. *Grammostola familiaris* (Bertkau).

Homœomma familiaris, Bertkau, 1880, Verzeichnis der . . . Brasil. Ar. p. 37, pl. i. fig. 11.

Homœomma familiaris, Petrunkevitch, 1911, Bull. Amer. Mus. Nat. Hist. p. 72.

It is a not uncommon species of Rio de Janeiro, but I have seen only the female. It is the most septentrional species from our fauna.

18. *Grammostola roquettei* *, sp. n.

♂.—68 mm.; ceph. 28×28 mm.; legs 105, 92, 83, 96 mm.; patella+tibia i. 38 mm., iv. 31 mm.; femur i. 28 mm.; protarsus iv. 24 mm.

Cephalothorax blackish, with a greyish clothing of short hairs and with large marginal reddish bristles. Falces, pedipalps, and legs brownish black, with large reddish-brown bristles, close-set on the legs; tibiæ and patellæ of all the legs with two longitudinal pale lines on the underside. Tarsal and protarsal scopulæ velvety rusty. Sternum blackish; coxæ of legs dull rusty brown; the underside of the abdomen rusty brown. Abdomen velvety black, with large reddish-brown bristles. Coxæ of pedipalps and falces with dull orange-brown bristles.

Carapace as long as wide, its length considerably less than patella and tibia iv. or i., slightly longer than protarsus iv., as long as femur i.; fovea deep, right transverse.

Stridulating organ as in *Grammostola gigantea*. Legs 1, 4, 2, 3, long and slender, i. noticeably longer than iv.; patella and tibia i. longer than iv.

Ocular tubercle moderately convex, nearly round. Eyes of the anterior row strongly procurved, the anterior edge of the medians being a little behind the centre of the laterals, a little unequal in size, the medians being the smaller, about

* Dedicated to Prof. Roquette Pinto, from the National Museum.

two diameters apart, and separated from the laterals a little more than a diameter; posterior medians much smaller than the anteriors, widely separated from them, closer to posterior laterals, which are about as large as the anterior laterals and separated from them by a space which is quite equal to the long diameter of the latter.

Protarsal scopula of i. covering less than half the segment, with a weak spine at its base; of ii. as on i., with 2-2 spines at its base; of iii. covering a little more than distal third, with many stout spines at its base; of iv. covering about $\frac{1}{2}$, which is elsewhere strongly spined; tibiae of all the legs spined; tibiae of the pedipalps unarmed. Protarsus i. very slightly bowed at its proximal end; spurs of tibia i. well developed, the upper stout, straight, cylindrical, blunt; the lower crescently cylindrical, curved, with a stout blunt spine on its apex and a long spine at base.

Hab. Rio Grande do Sul. Coll. Prof. Edgard Roquette Pinto. Type in the National Museum.

19. *Grammostola longimana*, sp. n.

♂.—65 mm.; ceph. 26 × 26 mm.; legs 103, 88, 77, 91 mm.; femur i. 28.5 mm., iv. 24 mm.; patella + tibia i. 39 mm., iv. 29 mm.; protarsus i. 24 mm.

Carapace black. Falces black, with mahogany-brown bristles. Legs blackish, with ochraceous-reddish bristles and with two longitudinal pale lines on the upper side. Abdomen wholly black, with erect, large, ochraceous bristles. Sternum and coxæ reddish black. Coxæ of pedipalps and inner margin of fang-groove with pale red-wine bristles.

Carapace as long as wide, its length considerably less than patella and tibia iv. or i., a little less than femur i., longer than femur or protarsus iv.; fovea deep, a little recurved.

Ocular tubercle very high, nearly round. Eyes of anterior row strongly procurved, the anterior edge of the medians being a little behind the posterior edge of the laterals, nearly evenly spaced and a little unequal in size, the medians being the smaller and separated from each other about two diameters; posterior medians much smaller than the anterior medians, closer to posterior laterals, which are a little smaller than the anterior laterals, and separated from them by a space which is larger than the long diameter of the latter. Sternum as wide as long, the posterior sigillæ separated from the margin more than a diameter.

Stridulating organ as in the preceding species. Legs 1, 4, 2, 3, the anterior legs being considerably longer than iv.;

patella and tibia i. much longer than iv. ; femur iv. shorter than i. Protarsal scopula of i. covering a little less than a half the segment, with two long spines at its base ; of ii. as on i. ; of iii. covering the distal third, with many basal spines ; of iv. covering about $\frac{1}{5}$, which is elsewhere strongly spined ; tibiæ of all the legs and of the pedipalpus spined.

Hab. Herval (Paraná).

Type in my own collection.

Rio, May 1920.

XXXVI.—*New or little-known Tipulidæ (Diptera).—IV.*
Ethiopian Species. By CHARLES P. ALEXANDER, Ph.D.,
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THIS paper is a continuation of the preceding parts under this title. The material included is almost all from Cameroun, collected by the Rev. J. A. Reis at Efulan, Batanga, and at Lonji near the Nlong River (erroneously written Ulou in Part II. of this series). The types are preserved in the collection of the writer, except where stated to the contrary.

Dicranomyia terebrina, sp. n.

General coloration brown, the mesonotum brownish-yellow pollinose, but without distinct markings ; antennæ brownish black ; head light grey ; femora light yellowish brown ; wings pale brown, stigma indistinct ; Sc_1 ends just before the origin of R_s , Sc_2 not far from its tip ; cell 1st M_2 closed ; ovipositor with the sternal valves bifid at their tips.

Female.—Length 6.4 mm. ; wing 7 mm.

Rostrum and palpi dark brown. Antennæ brownish black, the flagellar segments oval. Head light grey.

Mesonotum brown, heavily brownish-yellow pollinose, without distinct stripes. Pleura dark brown, sparsely pruinose. Halteres rather long, light yellow, the knobs brown. Legs with the coxæ concolorous with the pleura ; trochanters dull yellow ; femora light yellowish brown ; tibiæ and tarsi dark brown. Wings very pale brown ; stigma very indistinct ; indistinct brown seams along the cord and outer end of 1st M_2 ; veins pale brown, C and Sc light yellow, the former more orange distally and ending at R_{4+5} . Venation : Sc of moderate length, Sc_1 ending a

Ann. & Mag. N. Hist. Ser. 9. Vol. vii. 21